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FORM PTO-1390  
(REV 10-96)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

07856-0007

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371

INTERNATIONAL APPLICATION NO.  
PCT/EP95/03757

INTERNATIONAL FILING DATE  
22 Sept. 1995 (22.09.95)

PRIORITY DATE CLAIMED  
28 Sept. 1994 (28.09.94)

TITLE OF INVENTION

PEPTIDES FROM THE hPTH SEQUENCE

APPLICANT(S) FOR DO/EO/US

ADERMANN, Knut; HOCK, Dieter; MAGERLEIN, Markus

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1.  This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2.  This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3.  This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4.  A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5.  A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a.  is transmitted herewith (required only if not transmitted by the International Bureau).
  - b.  has been transmitted by the International Bureau.
  - c.  is not required, as the application was filed in the United States Receiving Office (RO/US)
6.  A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7.  Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a.  are transmitted herewith (required only if not transmitted by the International Bureau).
  - b.  have been transmitted by the International Bureau.
  - c.  have not been made; however, the time limit for making such amendments has NOT expired.
  - d.  have not been made and will not be made.
8.  A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9.  An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10.  A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern document(s) or information included:

11.  An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12.  An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13.  A **FIRST** preliminary amendment.  
 A **SECOND** or **SUBSEQUENT** preliminary amendment.
14.  A substitute specification.
15.  A change of power of attorney and/or address letter.
16.  Other items or information: **Verified Statement for Small-Entity Status**

EXPRESS MAIL LABEL NO. EM457482646US

17.  The following fees are submitted:

## BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)):

Search Report has been prepared by the EPO or JPO..... \$910.00

International preliminary examination fee paid to USPTO (37 CFR 1.482)  
..... \$700.00No international preliminary examination fee paid to USPTO (37 CFR 1.482)  
but international search fee paid to USPTO (37 CFR 1.445(a)(2)).. \$770.00Neither international preliminary examination fee (37 CFR 1.482) nor  
international search fee (37 CFR 1.445(a)(2)) paid to USPTO..... \$1040.00International preliminary examination fee paid to USPTO (37 CFR 1.482)  
and all claims satisfied provisions of PCT Article 33(2)-(4). \$96.00

ENTER APPROPRIATE BASIC FEE AMOUNT =

\$ 910.00

Surcharge of \$130.00 for furnishing the oath or declaration later than  20  30 months from the earliest claimed priority date (37 CFR 1.492(e)).

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE
Total claims	6 -20 =	0	X \$22.00 \$ --
Independent claims	2 -3 =		X \$80.00 \$ --
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$260.00 \$ --

TOTAL OF ABOVE CALCULATIONS =

\$ 910.00

Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity Statement  
must also be filed (Note 37 CFR 1.9, 1.27, 1.28).

\$ 455.00

SUBTOTAL =

\$ 455.00

Processing fee of \$130.00 for furnishing the English translation later than  20  30 months from the earliest claimed priority date (37 CFR 1.492(f)).

+ \$ --

TOTAL NATIONAL FEE =

\$ 455.00

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be  
accompanied by an appropriate coversheet (37 CFR 3.28, 3.31). \$40.00 per property + \$ 40.00

TOTAL FEES ENCLOSED =

\$ 495.00

Amount to be:	\$
refunded	\$
charged	\$

a.  A check in the amount of \$ 495.00 to cover the above fees is enclosed.

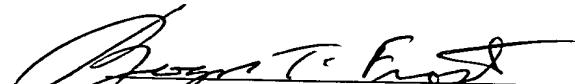
b.  Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.

c.  The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any  
overpayment to Deposit Account No. 10-1215. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Roger T. Frost  
Jones & Askew, LLP  
191 Peachtree St., #3700  
Atlanta, GA 30303



SIGNATURE:

Roger T. Frost

NAME

22,176

REGISTRATION NUMBER

UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION

PATENT NO. : 6,030,790  
DATED : March 27, 1997  
INVENTOR(S) : Knut Andermann et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 6.

After line 56, insert the following text:

-- The reaction is stopped by adding sodium acetate with a final concentration of 100mM. Incubation is allowed to proceed for one hour.

The protein-peptide conjugate is separated from the peptide by repeated dialysis against 100mM phosphatebuffer, pH 7.2.

Example 4

Synthesis of the Multiple Antigenic Peptides (MAP)

The triple lysine branching is achieved by binding Fmoc-L-lysine (Fmoc) -OH to C-terminal alanine bound to Wang resin using three coupling cycles. Cleavage with piperidine then results in eight free amino functions where the sequences of the human parathyroid hormone are synthesized according to the above description.

Example 5

Immunization

For the first immunization, 125 mg of carrier-peptide conjugate or MAP per kg body weight of the animal to be immunized is dissolved in 250 ml of water and emulsified with 250 ml of complete Freund adjuvant. The emulsion is applied subcutaneously in 10 portions at various positions on the back.

Boosting is carried out after 2-4 weeks in an analogous fashion, the only change being the substitution of the complete Freund adjuvant by the incomplete Freund adjuvant.--

Signed and Sealed this

Twenty-seventh Day of August, 2002

Attest:



Attesting Officer

JAMES E. ROGAN  
Director of the United States Patent and Trademark Office